Fruitland Mg Fire ER Site

Draft Summary for Soil Sampling
July 10, 2016

RESIDENTIAL SOIL SAMPLING

On June 18, 22, and 24, 2016, the EPA START contractor collected surface-scrape composite soil samples from 17 parcels of land located along the north side of E 52nd Street and Everett Avenue in Maywood, California. On July 1, 2016, additional surface scrape composite soil samples were collected from 7 parcels of land along the south side of E 52nd Street.

A 5-point composite soil sample was collected from each discrete yard observed on each parcel. In most cases the subject parcels contained a front yard, a back yard, and a side yard. Some of the parcelsare occupied by residential apartment units surrounded by concrete pads, with little-to-no backyards or side yards. In one such case (address [redacted] particulate matter on the surface of the concrete pad at the rear of the parcel was collected in lieu of a soil sample.

Each 5-point composite soil sample was collected by selecting five random locations evenly spaced across the yard. Locations were selected with a bias towards bare soil rather than vegetated soil. Where only vegetated soil was encountered, the topmost layer of soil under the vegetation was collected.

Soil was collected into stainless steel bowls for homogenization using stainless steel trowels. All sampling equipment was decontaminated between samples with an alconox soap wash and a two-stage distilled water rinse. Homogenized soil was transferred directly into pre-cleaned glass jars that were placed into a cooler on ice for delivery to the designated laboratory.

Laboratory analyses for composite soil samples collected on June 18, 2016, were total(target analyte list [TAL] 23) metals, TCLP metals, and STLC metals. Laboratory analysis for composite soil samples collected on June 22, 24, and July 1, 2016 was total (TAL 23) metals.

Soil sample analytical results were tabulated and compared to Regional Screening Levels (RSL, May 2016). Arsenic concentrations exceeded the RSL value of 0.78 mg/kg at all residential parcels. This exceedance is typical based on the combination of naturally-occurring and anthropogenic background concentration of arsenic in urban residential environments in Southern California, characterized as 12 mg/kg according to a report produced by the Department of Toxic Substances Control (DTSC). Arsenic concentrations exceeded 12 mg/kg on two parcels of land ([redacted] = 27.7 mg/kg, and sweepings from the back concrete pad at [redacted] 22.7 mg/kg). Analytical results for thallium also exceeded the RSL in soil samples collected from the backyard at [redacted] (1.37 and 4.74 mg/kg thallium, respectively). All other residential soil sampling results were reported below the applicable RSL.